

AMENDMENTS TO THE CLAIMS

Please cancel claim 33, amend claims 34-35, 38-43, and 46, and add new claim 50, as follows:

1-27. (Canceled)

28. (Original) A retro-reflective marker for use in a patient treatment system comprising:
a raised reflective surface; and
a flat surface located at the base of the raised reflective surface.

29. (Original) The retro-reflective marker of claim 28 in which the raised reflective surface comprises a hemispherical shape.

30. (Original) A marker block for use in a patient treatment system comprising:
a surface area;
a first reference location on the surface area;
a second reference location on the surface area; and
the first reference location and the second reference location positioned on the surface area such that both reference locations are simultaneously detectable by an optical imaging apparatus.

31. (Original) The marker block of claim 30 in which the first and second reference locations comprise retro-reflective material.

32. (Original) The marker block of claim 30 comprising a shape that matches a patient body location.

33. (Canceled)

34. (Currently Amended) The system of claim ~~33~~ 50 in which said two or more reflective elements are retro-reflective elements.

35. (Currently Amended) The system of claim ~~33~~ 50 in which said marker block is shaped to fit a specific body location.

36-37. (Canceled)

38. (Currently Amended) The system of claim ~~33~~ 50 in which absolute coordinate of said one or more optical imaging apparatus is known.

39. (Currently Amended) The system of claim ~~33~~ 50 in which viewing orientation of said one or more optical imaging apparatus is known.

40. (Currently Amended) The system of claim ~~33~~ 50 in which relative absolute coordinate of said one or more optical imaging apparatus is known.

41. (Currently Amended) The system of claim ~~33~~ 50 in which said one or more optical imaging apparatus comprises CCD cameras.
42. (Currently Amended) The system of claim ~~33~~ 50 further comprising a computing device to receive output information from said one or more optical imaging apparatus, the computing device having a processor configured to determine the position and orientation of said marker block.
43. (Currently Amended) The system of claim ~~33~~ 50 further comprising a video display device to display a video image of said patient.
44. (Previously Presented) The system of claim 43 in which said video image comprises real-time images of said marker block.
45. (Previously Presented) The system of claim 43 in which said video image comprises real-time images of said patient.
46. (Currently Amended) The system of claim ~~33~~ 50 further comprising a video display device to display a video image of said patient.
47. (Previously Presented) The retro-reflective marker of claim 28 in which said flat surface forms a mounting area.

48. (Previously Presented) The marker block of claim 30 that is formed of Styrofoam.
49. (Previously Presented) The marker block of claim 30 comprising a shape to fit a fixture that attaches to a patient body.
50. (New) A system for detecting a marker block in a patient treatment system, comprising:
one or more optical imaging apparatus;
a marker block having a surface;
two or more reflective elements located on said surface, said two or more reflective elements having known relative positioning; and
said marker block positioned such that at least two of said two or more reflective elements are viewable by said one or more optical imaging apparatus.